

Arabic Pharmaceutical Terms in Middle Armenian

JOHN A.C. GREPPIN
Cleveland State University

Arabic medicine had a pronounced influence on the medieval Armenian physician. By and large, Arabic medical thought was built upon Classical Greek models, reflecting the energies of such men as Hippocrates (5th - 4th century, BC), Dioscorides (1st century AD), Galen¹ (2nd century AD), and others. And it was these Greek ideas, filtered through fertile Arab minds, that brought new ideas to the medieval Armenian physician.² This Arab thought had immense stature, and it was abundant, the outpourings particularly of such dynamic thinkers as Rhazes and Avicenna,³ men who had a strong influence not only on Arabic culture, but also on the thinking of European medical practitioners, who translated original Arabic works into Latin.⁴

Necessarily, the Arabic intellectual influence came after their invasion into Armenia in 651 when the sovereignty of the Caliphate established a climate receptive to Arab thinking. And from the late ninth century, Greco-Roman medical thought, though already known to the Arabs, became more widespread through the successful translations, particularly of Galen, by Hunain ibn Ishâq⁵ (d. 873). And though it is clear that the Armenians had long been familiar with Galenic⁶ concepts, the enriched medical mixture brought by the Arabs was a decided stimulant to the Armenian physician.

Necessarily Armenia would benefit. The Gagik-Hetumian *Bžškaran*,⁷ that startling work of the earliest eleventh century, was certainly a reflection more of Arabic ideas, and especially those of Avicenna,⁸ than of the Greek, which had been eclipsed by the younger and more vigorous Arabic models.

There exists a Greek-Armenian dictionary called the *Baṛk' Gaḥianosi*.⁹ Whether or not it was actually built on the vocabulary¹⁰ of Galen, certainly by its title it reflected the importance of Galen to the Armenian physician. Though there is no sure proof, it is the traditional view, reflected in contemporary Soviet-Armenian scholarship, that the *Baṛk' Gaḥianosi* was first compiled in the sixth century,¹¹ during the Hellenizing period. I have no reason to differ with this view; it is not only possible, it is likely, for many elements of the Armenian vocabulary seem to have a special appropriateness to that Period.¹² Yet there is also a clear tampering with the *Baṛk' Gaḥianosi* at a later period, for there are numerous Arabic words inserted.¹³ At least fifty Armenian glosses are provided for entries that are not Greek, but Arabic. These words could in no way have been part of the first level of preparation during the Hellenizing period. It is likely that this Arabic material was added by the tenth century; though as with the Greek material, it is impossible to give more than an approximate date. One can only guess.

Thus there are two levels of composition for this dictionary: the Greek level from perhaps the sixth century, and the smaller Arabic level from perhaps the tenth century. And in addition to this Arabic level, where Arabic words were entered into the dictionary and glossed by the approximate Armenian synonyms, other Arabic words are also found. These additional words are not main entries to be glossed by the Armenian synonym; rather the Arabic words are used as glosses themselves, in addition to or in place of the appropriate Armenian term. These Arabic words, used as glosses for Greek entries, do not appear in every manuscript copy of the *Baṛk' Gaḥianosi*; they in no way represent a wholesale pattern of Arabic glosses. Rather, they are frequently the random insertions of individual scribes.¹⁴

The list of these Greek entries that have Arabic glosses, either wholly or in part, is not large; it includes only nine words out of the total 450 decipherable entries that appear in the *Baṛk' Gaḥianosi*. Yet the Arabic words are of interest for a variety of reasons, most of all for the way they were retained or not retained as part of the Modern Armenian vocabulary. In a few cases they seem to have eclipsed the original Armenian words; elsewhere they shared an equal status; but in most cases the Arabic word had little effect on the Armenian language beyond its appearance in the *Baṛk' Gaḥianosi*. The words are as follows:

1. *farfarah* (فرفره), for Gk. βήχιον 'colt's foot, *Tussilago farfara* L.' The standard Armenian is *xočkorak*. The entry in the dictionary is corrupt: *p'alp'al*.

2. *gazar* (*جزر*), for Gk. *δαῦκος* '(wild) carrot, *Daucus carota* L. (var. Boissier, Wittm.)' The standard Armenian is *steplin* though this word is still used in some dialects for the 'parsnip' as well.

3. *khiyâr* (*خيار*), for Gk. *ἄγγούριον* 'cucumber, *Cucumis sativus* L.' The standard Armenian is *varung*. In this entry, Ar. *khiyâr* (written in Armenian letters as *xiar*) is the sole gloss for the Greek entry.

4. *khiyâr šanbar* (*خيار شنبّر*) 'Indian laburnum, *Cassia fistula* L.', in error for Gk. *κρόκος* 'crocus, *Crocus sativus* L.' The standard Armenian for 'Indian laburnum' is *žmirak*.

5. *mišmiš* (*شمش*), for Gk. *βερικόκκιον* 'apricot, *Prunus armeniaca* L.' The standard Armenian is *ciran*.

6. *qaṭīfah* (*قطيفه*), for Gk. *βλίτον* 'any of the genus *Amaranthus*, various types of weedy plants.' The standard Armenian is *anmeruk*. The gloss, as it appears in the manuscripts, is corrupt: *xati*. It is the sole gloss for the Greek entry.

7. *sarw* (*سرو*) for Gk. *κυπάρισσος* 'cypress, *Cupressus sempervirens* L.' The standard Armenian is *noč(i)*. It is the sole gloss for the Greek entry.

8. *šammâm* (*شمام*) 'sweet melon, *Cucumis dudaim* L. var. *Aegypticus*,' in error for Gk. *ἄμιν*¹⁵ 'coriander, *Cornium sativum* L.' The standard Armenian for 'sweet melon' is *egiptakan sexeni*.

9. *sunbul* (*hindi*) (*سنبل [هندی]*), for Gk. *νάρδου στάχυς* 'spikenard, *Nardostachys jatamansi* DC.' The standard Armenian is (*hndik*) *nardos*.

According to two specialized botanical dictionaries published in Yerevan,¹⁶ only *gazar* has survived into Modern Eastern Armenian as a principal term. There is seems to have replaced *steplin*, a word known in Armenian since the seventh century, when it appears in the *Book of Merits* (Venice 1877.74). It is certainly cognate in some way with Gk. *σταφυλῖνος* 'carrot', a term which passed on whole to Lat. as *staphylinus* 'carrot, parsnip', appearing also in Arabic as *iṣṭaflîn* (*أصطفلين*) (Qamûs 3.131), Syriac *eṣṭaflin* and Georgian *ṣṭapilo* 'carrot.' Armenian *steplin* might have lost its position to *gazar* since, in some dialects, it was ambiguously used both for 'carrot' and 'parsnip.' However, in the Western dialect of Armenian it seems more securely to be 'carrot', and the term is commonly used there without ambiguity.

But Arm. *xiar* 'cucumber' is certainly still known, though not as a principal term; for that there is the traditional Armenian word *varung*, which goes back to the fifth century and P'austos Buzand (St. Petersburg 1883.184). Arm. *smbul* 'nard' is used in the Eastern Dia-

lect, the lesser-known equivalent of Arm. *nardos* (< Gk. *várdos*), a term which goes back to the Bible (Song of Solomon 1.12, 3.13, 14). Yet in the Eastern Dialect it does not seem to be used for 'nard', but rather for similar grasses, those of the genus *Stipa*. The word *sarw* appears to be a hapax, but is adjacently continued in the form *saroy* 'cypress' into Modern Armenian;¹⁷ the more common term is *noč(i)*, itself a word from Middle Persian: Phl. *nôč*, NPer. *nûč* (نوح).

With the exception of those three Arabic terms that are commonly continued into Modern Armenian, the Arabic words found as glosses in the *Bark' Galianos* are not generally part of Modern Armenian speech. And, of those words that are continued, only one, *gazar*, has any vigor. It would seem as if Armenian has consciously, and with a linguistic memory, separated out the Arabic words after the Arabs ceased to have an influence on Armenian culture. It reveals, in a small Middle Eastern people, the desire on one hand to live with their conquerors, using the better parts of the conquering culture; then, having freed themselves, to willingly shuck off the vestiges of that culture.

I think it is possible to date the time that the bulk of these Arabic words were cast away. The dating cannot be made sharply for any one word in particular, but can be made for the whole, with the understanding that precise parts may not fit with complete accuracy. In addition to checking botanical handbooks to determine the standard speech of late twentieth-century Armenian, I also consulted with native West Armenian speakers. They confirmed that none of these terms, *gazar*¹⁸ 'carrot' included, were continued as prime words in their dialect of Armenian. Thus, I would ask their word for "cucumber," and they would reply "*varung*," not "*xiar*;" for "apricot" - "*ciran*," not "*mišmiš*," etc.

Having finished this process, I then asked if they knew at all the Arabic words that were secondarily continued in the Eastern Dialect: *mišmiš*, *gazar* and *xiar*. In all instances they first identified the word as Turkish, but after a moment's reflection said no, instead it was really Arabic. Significantly, they said that they had first heard the words from their grandparents, who used them instead of the standard Armenian terms. This newer generation had then abandoned the so-called Turkish/Arabic word when they had learned Arabic itself, and realized that the word was not native Armenian. This movement that focused on the abandoning of foreign elements in Armenian had its inception in Istanbul in the mid-nineteenth century, championed by such intellectuals as Zoroyan, Odeon, and Roussignan, men of attainment and spirit. Yet it is one thing to begin to purify a literary language and quite another thing to do the same for the speech of the unedu-

cated peasant. The movement of the intellectuals had its greatest results among the peasant class following the massacres of 1915. Then the peasant began to share the feeling that it was no longer acceptable to maintain what he realized was foreign Turkish/Arabic vocabulary. The standard Armenian terms were again brought into use. The language thus purified itself, purging these foreign elements on the level of everyday speech. And though these words are not wholly lost in Armenian, they have become, at least, foreign vocabulary, a status they first held nearly a millennium ago.

NOTES

¹ Galen seemed to capture the Armenian mind more than any other of the Greco-Roman physicians. Numerous medical manuscripts begin with the phrase "The wise Galen says . . ." (Conybeare 1921.368); or "This is the list of medicaments which Galen compiled . . ." (Pogharean 1968.569).

² But the flow went in the other direction, too. A medieval Arab scholar, arriving in Sis, sought manuscripts to loot. He brought back with him the *Bžškarān jioy*, a work on veterinary medicine. In his Arabic translation (copies being available in the National Library of Medicine in Bethesda, Maryland and the Bibliothèque National in Paris) the Arab physician gave credit to the Armenian original. The *Bžškarān jioy* has been published (Chookaszian 1980), and an article on the Arabic version, by Chookaszian, will appear in a forthcoming issue of the *Banber Matenadarani*.

³ Rhazes (860-932), Persian by birth, was an especially observant clinician; he described for the first time (*Liber de pestilentia*) the difference between measles and smallpox; he was translated into Latin in the fifteenth century. Avicenna (980-1037), like Rhazes, Persian by birth, was as well known for his philosophical writings as he was for the original ideas he had in medicine (especially on pharmacology) that appeared in his *Qānān* (Canon). He was abundantly translated into Latin.

⁴ In some instances an Arab physician would be better known in Europe, through Latin translations, than in the Arabic-speaking lands. Serapion junior's (fl. 1070) *Kitāb-al-adwiya al-mufrada* has been wholly lost in the original while the Latin version, *De medicinis simplicibus*, went through seven separate editions in the eighty years between 1473 and 1552.

⁵ Hunain ibn Ishāq first translated the *Simples* into Syriac (ca. 840), and only later into Arabic. There is also a tradition that says it was actually Hunain's nephew, Ḥubaiš ibn al Ḥasan, who translated the *Simples* into Arabic.

⁶ In addition to the references cited in note one, there exists at least one instance where we can find a version of some Galenic passages rendered in Armenian. Here see John Scarborough, "Medieval Armenia's Ancient Medical Heritage," *Journal of Armenian Studies*, vol. 3, 1986 forthcoming.

⁷ Here see the delightful essay, published in English as a separatum jointly by the Yerevan Matenadaran and Sovetakan Grogh, of Dr. Stella Vardanyan: *Medicine in Ancient and Medieval Armenia*, Yerevan 1982, p. 56 in 16vo.

⁸ Avicenna was particularly well regarded, and his lengthy *Canon* (*Al-qânân fi-al-ṭibb*) was not only translated into Latin, but it was also printed in the original Arabic in Rome in 1593 (*Typographia Medica*). The pharmacological portions of this book were clearly based on Galen's theories about the relative level of "heat" that particular pharmaceuticals produced, but Avicenna dealt with many more plants than Galen, and also revised and enlarged upon Galen's concepts of heat.

⁹ *Bark' Galianosi: The Greek Armenian Lexicon to Galen*. John A.C. Greppin (ed.). Caravan Books, Box 344, Delmar, New York 12054 (1985).

¹⁰ The words in the *Bark' Galianosi* seem overwhelmingly to be from the *Simples* of Galen, a pharmacological handbook. This appears, with a parallel Latin translation, in Kühn's edition of the *Opera*: XI.379-892, XII.1-377; Leipzig 1821; reprinted Georg Olms, Hildesheim, 1964.

¹¹ Here see Hovhannisyan 1946.1.176, within the context of a discussion of the influence of Greek medicine during the sixth through eighth centuries.

¹² It is clear that the Armenian glosses are those of the Classical period (*Grabar*) rather than of the Middle Armenian period. But it is impossible, using vocabulary alone, to say that the *Bark' Galianosi* is specifically a work of the sixth century, rather than of the seventh or eighth.

¹³ Here see Greppin, "The Arabic Elements in the Armenian 'Galen' Dictionary." *REArm* XIX, 1985, and "Some Greek and Arabic Words of the Byzantine Period in the Armenian *Galen Dictionary*." *Byzantion* forthcoming.

¹⁴ Some have greater currency than others. Gk. ἀγγοῦριον, glossed by *xiar* (= Ar. *khiyâr*) is found in Yerevan MSS 266, 532, 536, 538, 3201, 3202, and 2335, a fairly wide distribution; *gazar*, a well known term, is found only in MSS 268, 534, 537, 540. In a sole instance, an Arabic gloss (*šammâm*) appears in only one MS, No. 5925 (Jerusalem).

¹⁵ Gk. ἀνιόν 'coriander' is clearly cognate with numerous Semitic words: Heb. *ḥāmōm*, Ar. *ḥamâmâ*, from the root *ḥmm* (ح م م) 'be warm.' This Greek word is one of hundreds that seem derived somehow from the Semitic group and represent a period of intense cultural cohabitation between the very early Greeks and the Semites. The so-called Mesopotamian period was first described by Lewy (1895) and, more recently, by Masson (1967). The Armenian cognate is *hamem* 'id,' but this in medieval times had the meaning Cardamon, genus *Amomum* (S. Vardanian, *per lit.*).

¹⁶ Here see Tsaturyan 1962, a handbook that has now been largely replaced by Ghazaryan 1982.

¹⁷ The form that appears in the manuscript is clearly *sarw*, not *saroy*, an Armenian equivalent known in the Bible (Ez 31.8), where it is probably from Pahlevi; see NPer. *sarv* (س ر و), and Hübschmann AG 237.

¹⁸ The pronunciation *gazar* is the pronunciation in the Egyptian dialect of Arabic, and is historically more conservative than the pronunciation found elsewhere, *jazar*, used by most Armenians.

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